

#6

1648

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/586,479

DATE: 03/29/2001
 TIME: 10:08:46

Input Set : A:\399-11.app
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ENTERED

3 <110> APPLICANT: Schmidt, Alexander C.
 4 Skiadopoulos, Mario S.
 5 Collins, Peter L.
 6 Murphy, Brian R.
 7 Bailly, Jane E.
 8 Durbin, Anna P.
 10 <120> TITLE OF INVENTION: ATTENUATED HUMAN-BOVINE CHIMERIC PARAINFLUENZA VIRUS
 11 (PIV) VACCINES
 13 <130> FILE REFERENCE: 15280-399-1US
 15 <140> CURRENT APPLICATION NUMBER: 09/586,479
 16 <141> CURRENT FILING DATE: 2000-06-01
 18 <150> PRIOR APPLICATION NUMBER: 60/143,134
 19 <151> PRIOR FILING DATE: 1999-07-09
 21 <160> NUMBER OF SEQ ID NOS: 31
 23 <170> SOFTWARE: PatentIn Ver. 2.1
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 28 <213> ORGANISM: Artificial Sequence
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 33 Ka
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 47 rBPIV3 Ka
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 61 rBPIV3 s
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 67 <210> SEQ ID NO: 4
 68 <211> LENGTH: 12

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89     rHPIV3 s
91 <400> SEQUENCE: 5
92 cgcaccggtg ta                                     12
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103     rBPIV3 Ka
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106 gatataaaga                                     10
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133 <400> SEQUENCE: 8
134 gacaaaaggg                                     10
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145     rHPIV3 s
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178 <211> LENGTH: 12
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185     start codon
187 <400> SEQUENCE: 12
188 taaccatggt ga                                     12
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199     stop codon
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207 <212> TYPE: DNA
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224 <220> FEATURE:
225 <223> OTHER INFORMATION: Description of Artificial Sequence: Sequence
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227     stop codon
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260 <211> LENGTH: 40
261 <212> TYPE: DNA
262 <213> ORGANISM: Artificial Sequence
264 <220> FEATURE:
265 <223> OTHER INFORMATION: Description of Artificial Sequence: Sequence
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268 <400> SEQUENCE: 18
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272 <210> SEQ ID NO: 19
273 <211> LENGTH: 40
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275 <213> ORGANISM: Artificial Sequence

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277 <220> FEATURE:
278 <223> OTHER INFORMATION: Description of Artificial Sequence: Sequence
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286 <211> LENGTH: 40
287 <212> TYPE: DNA
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290 <220> FEATURE:
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292     flanking N gene stop codon in cKa and cSF
294 <400> SEQUENCE: 20
295 tcagtgcatt cggaagcaac tagtcgaatc aacattttaa           40
298 <210> SEQ ID NO: 21
299 <211> LENGTH: 40
300 <212> TYPE: DNA
301 <213> ORGANISM: Artificial Sequence
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305     flanking N gene stop codon in Ka and SF
307 <400> SEQUENCE: 21
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312 <211> LENGTH: 15456
313 <212> TYPE: DNA
314 <213> ORGANISM: Bovine Parainfluenza Virus 3 (Ka strain)
316 <400> SEQUENCE: 22
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319 tattcgacac attcagtgcg cgtaggcagg agaacataac gaaatcagct ggtggggctg 180
320 ttattcccgg gcaaaaaaac actgtgtcta tatttgcctc tggaccatca ataacagatg 240
321 acaatgataa aatgacattg gctcttctct ttttgtctca ttcttttagac aatgaaaagc 300
322 agcatgcgca aagagctgga tttttagttt ctctgttata aatggcttat gccaaaccag 360
323 aattatattt aacatcaaat ggtagtaatg cagatgttaa atatgttatc tacatgatag 420
324 agaaagaccc aggaagacag aaatatgggtg ggtttgcgt caagactaga gagatgggtt 480
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330 cccaacagag cttggtaaca ctcatgggtg aaacactgat aacaatgaac acaggcagga 840
331 atgatctgac aacaatagaa agaataatac agattgtagg aaactacatc agagatgcag 900
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336 aggccatgca acagtatgta acagggaagg cttatctgga tattgaaatg ttccaacttg 1200
337 gtcaagcagt ggcacgtgat gccgagtcgc agatgagttc aatattagag gatgaactgg 1260

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VERIFICATION SUMMARY

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